

Job Description  
*Missouri State Highway Patrol*

Class Title: Scale Maintenance Technician

Title Code: V00701

Effective Date: 06/05/95

Date Reviewed: 6/24/2009 LJ

Date Revised: 6/24/2009 HRD

**Immediate Supervisor:** Division Director

**Position Supervised:** None

**FLSA Classification:** Non-exempt

**Working Hours:** An employee in this position works an eight-hour shift as directed by the division director; however, working hours are subject to change at the discretion of the commanding authority.

POSITION SUMMARY

The Scale Maintenance Technician is a licensed journeyman-level employee who performs skilled electrical and mechanical work in the maintenance, repair, overhaul, inspection, remanufacturing, and testing of Highway Patrol wheel load, axle load, full vehicle scales, and clinical scales throughout the state. The work involves adjusting, altering, repairing, or fabricating electronic and mechanical parts. The employee may work closely with contracting companies and the Missouri Department of Transportation (MoDOT) in the installation and acceptance of full vehicle platform scales and equipment associated with the Intelligent Highway System related to the monitoring and tracking of commercial vehicles for compliance with state and federal laws and regulations. Testing and repairing postal, warehouse, UPS, and evidence weighing devices used by other divisions within the Highway Patrol. An employee in this class may perform minor construction and repair of other equipment at a weigh station. The employee works long, irregular hours in the outdoors in extreme weather conditions. Work includes the operation of a diesel truck with a manufacturer's rated capacity of at least 15 tons and extreme overnight travel. Work is performed in extremely soiled and unsanitary environments and involves exposure to hazardous situations. Work is performed under general supervision of a superior and work is checked through performance of equipment and through occasional inspections.

DESCRIPTION OF DUTIES PERFORMED

(Any one position may not include all of the duties listed nor do the listed examples include all tasks which may be found in positions of this class.)

Inspects and tests Highway Patrol's wheel load weighers, axle load scales, and clinical scales for proper functioning and accuracy.

Installs, services, repairs, or reconditions full vehicle scales, wheel load weighers and axle load scales.

Works with MoDOT regarding the inspection, testing, repairing, and maintaining of equipment associated with the Intelligent Highway System.

Provides scale certification and preventative maintenance on private municipalities holding contracts with the Patrol's Scale Maintenance section.

Installs, tests and repairs postal, warehouse, UPS, and evidence weighing devices used by other divisions within the Highway Patrol.

## Scale Maintenance Technician

2

Operates a diesel truck with a manufacturer's capacity of 15 tons over a variety of roads and in all weather conditions; provides assistance to the motoring public in the event of mechanical conditions; provides assistance to the motoring public in the event of mechanical breakdowns, accidents, illnesses, or injuries and relays information to the proper jurisdiction or agency.

Uses standard and specialized electrical tools, as well as other hand tools ordinarily used in electrical work, to install and make electrical repairs on specialized weigh scale electronic systems.

Fabricates, alters, repairs, or reconditions metal scale parts using a power lathe, cold saws, hand drill press, oxygen-acetylene torch, arc welder, sander, grinder, and other similar equipment.

Participates in the development and preparation of proposed regulations, orders, bulletins, and procedural guidance for commercial vehicle enforcement personnel in proper weighing techniques and scale maintenance requirements.

Prepares proper computerized maintenance records for the department, other regulatory agencies, prosecuting officials, courts, etc., and provides court testimony in support of the accuracy and testing of the Patrol's weigh scales.

Jointly, with MoDOT, approves the installation of new axle load scales at weigh stations, as authorized or required.

Collects and sorts information from MoDOT weigh-in-motion and vehicle classifiers to determine commercial vehicle traffic volumes and peak travel time throughout the state for statistical purposes.

Maintains a record of the amount of materials used in the performance of job duties; compiles periodic reports.

Performs minor construction and installation of other equipment at weigh stations.

Performs other job related duties as assigned.

### REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES

Working knowledge of the occupational hazards and safety precautions associated with scale maintenance and repair.

Working knowledge of the methods, practices, tools, and materials used in the installation, repair, and maintenance of axle load and wheel load weigh scales.

Possess the skill to make involved calculations in installing mechanical and electrical weigh scale equipment and to find and repair mechanical and electrical defects on highly specialized weigh scale equipment.

Possess the skill to work from drawings, blueprints, wiring diagrams, and specifications in order to estimate, plan, and lay out scale maintenance work.

Ability to read English effectively.

Ability to communicate in English clearly and concisely, both orally and in writing.

Ability to communicate effectively in oral and written form and to understand and effectively carry out oral and written instructions.

## Scale Maintenance Technician

3

Ability to prioritize, organize, and plan work effectively.

Ability to effectively and professionally supervise the work of others.

Ability to make decisions in accordance with laws, policies, and regulations and apply these to work problems.

Ability to keep inventory of supplies and place orders to replenish supplies in a timely manner.

Ability to operate a diesel truck with a manufacturer's capacity of 15tons over a variety of roads and in all weather conditions.

Ability to work in extremely soiled and unsanitary environments, inclement weather conditions, and hazardous situations.

Ability to work with a variety of tools in the performance of duties (e.g., electrical tools, hand tools, electric saws, hand drill, drill press, oxygen-acetylene torch, arch welder, sander, grinder, etc.).

Ability to perform extensive job-related travel.

Ability to attend meetings and represent the Patrol on matters relating to technical specifications, tolerances, and other technical requirements for wheel load weighers and axle load scales.

Ability to testify in court.

Ability to establish and maintain harmonious working relations with others.

Ability to work with material that may be of a sexual nature relating to criminal activity (e.g., written material, photographs, and/or verbal language, etc.)

Ability to work hours assigned.

### MINIMUM EXPERIENCE, EDUCATION, AND TRAINING REQUIRED

(The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution will be permitted in case of deficiencies in either experience or education.)

Must be a high school graduate or possess a certificate of equivalency issued by a State department of Education.

Must have completed a formal two-year degree in electronics or related field and have completed three years in the scale maintenance trade for commercial vehicle axle load and wheel load weigh scales or equivalent training and experience.

Must possess and maintain a Class B Commercial Drivers' License (CDL) with air brake endorsement.

Must possess a Scale Maintenance license issued by the Missouri Department of Agriculture (Department of Agriculture requires a minimum of one year as an apprentice before testing).

Scale Maintenance Technician

4